

ASK THE DOC: MAY 2022

TOPIC: **T H E
B I C E P S**

THE ROLE OF THE BICEPS IN TENNIS



WHAT IS THE BICEP(S) AND WHAT IS ITS ROLE IN TENNIS?

The bicep is a muscle in the upper arm that helps flex the elbow and supinate the forearm (rotate the forearm so that the palm faces up). At the elbow there is one tendon, while at the shoulder there are two tendons with one running along the front of the humeral head (ball of the shoulder). In the shoulder, the biceps play a role in stabilizing the humeral head (ball of shoulder) when the shoulder is brought into significant external rotation (while serving and getting the racquet from behind you up to strike the ball).

HOW DID I HURT MY BICEPS?

A common cause of anterior shoulder pain is biceps tendinitis. It usually creates pain when the tendon is being stretched, for example, bringing the arm behind your back when putting on a coat or reaching into the back seat of the car. It becomes inflamed if we put too much stress on this area when bringing the elbow too far behind the plane of the shoulder blade, particularly if there is not much flexibility in the biceps or shoulder. Repetitive actions of this nature, such as serving, particularly aggravate a tight bicep.

HOW CAN I MAKE MY BICEPS FEEL BETTER?

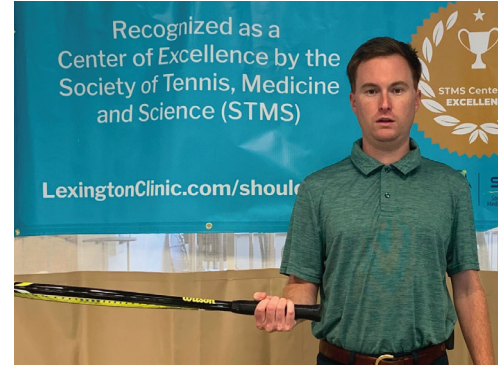
Biceps inflammation commonly improves with rest and stretching. Anti-inflammatories can be helpful, including steroid Dosepak or steroid injections. Eccentric strengthening (elongating the muscle and tendon while it is contracting) is one of the better ways to relieve symptoms. Additionally, taking stress off the biceps by improving scapular stability and rotator cuff strength can be achieved with exercise. Evaluating the mechanics of your serve and being mindful of the times that this area of the shoulder hurts, you can modify these activities to put less stress on the biceps.

Particularly during the serve, making sure the elbow is staying in line with your shoulder blade and not coming behind your back is one of the more important aspects of the serve to address. Lexington Clinic offers a video-based serve analysis (OTSAs) to evaluate serve mechanics to help identify these mechanical issues. If symptoms persist, an evaluation by an orthopedic surgeon is recommended.



B I C E P S E X E R C I S E S

PRONATION/SUPINATION



Stand tall. Start with racquet in neutral. Rotate forearm each direction as pictured slowly. Hold for 3 counts each way.

REPEAT: Repeat 10 times; 1 set. 1 session per day.

ECCENTRIC BICEPS



Begin with elbow bent and forearm supinated (palm facing you).

Slowly lower weighted ball, moving forearm to a pronated (palm up) position.

Slowly lower for a count of 5 seconds until forearm faces downward.

REPEAT: Repeat 10 times; 1 set. 1 session per day.

If you are unsure about how to perform these exercises, are not getting better after attempting on your own for 2-3 weeks and/or would prefer to receive one-on-one evaluation and instruction, we recommend calling Lexington Clinic Orthopedics at 859.258.8575 to schedule an appointment with one of our Orthopedic physicians or Physical Therapists (doctor referral not required). Lexington Clinic also offers a Walk-in Clinic Mon/Thurs/Fri from 8:00 a.m.-3:00 p.m. and Tues/Wed from 8:00 a.m. - 7:00 p.m.—no appointment necessary.

An important aspect of rehabilitating the biceps is improving mobility and eccentric loading as portrayed in the above exercises, but a comprehensive program should include scapular stability exercises which have been included in previous articles.